PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:
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WRITTEN OPINION
(PCT Rule 66)

Date of Mailing *(day/month/year)*	26 AUG 2004
Applicant's or agent's file reference 884-0158WOU	REPLY DUE within 1 months/days from the above date of mailing

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US03/17127	29 May 2003 (29.05.2003)	29 May 2002 (29.05.2002)

International Patent Classification (IPC) or both national classification and IPC

IPC(7): A45D 20/00 and US Cl.: 34/96

Applicant

CONAIR CORPORATION

1. This written opinion is the first (first, etc,) drawn by this International Preliminary Examining Authority.

2. This opinion contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2 (a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

3. The applicant is hereby **invited to reply** to this opinion.

When? See the time limit indicated above. ~~The applicant may, before the expiration of that time limit, request this Authority to grant an extension. See rule 66.2(d).~~

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also For an additional opportunity to submit amendments, see Rule 66.4.
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 *bis*.
For an informal communication with the examiner, see Rule 66.6

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.

4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 29 September 2004 (29.09.2004).

Name and mailing address of the IPEA/US
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Commissioner for Patents
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Alexandria, Virginia 22313-1450
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Kenneth Rinehart
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WRITTEN OPINION

International Application No.
PCT/US03/[redacted]27

I. Basis of the opinion

1. With regard to the elements of the international application:*

☒ the international application as originally filed.

☒ the description:
pages 1-9, as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.

☒ the claims:
pages 10-14, as originally filed
pages NONE, as amended (together with any statement) under Article 19
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.

☒ the drawings:
pages 1-11, as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.

☐ the sequence listing part of the description:
pages NONE, as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.
These elements were available or furnished to this Authority in the following language _____ which is:

☐ the language of a translation furnished for the purposes of international search (under Rule23.1(b)).

☐ the language of publication of the international application (under Rule 48.3(b)).

☐ the language of the translation furnished for the purposes of international preliminary examination(under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:

☐ contained in the international application in printed form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ The statement that the subsequently furnished written sequence iisting does not go beyond the disclosure in the international application as filed has been furnished.

☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☒ The amendments have resulted in the cancellation of:

☒ the description, pages none _____

☒ the claims, Nos. none _____

☒ the drawings, sheets/~~fig~~ none _____

5. ☐ This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

** Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."*

WRITTEN OPINION

International application No.
PCT/US03/17127

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. STATEMENT

Novelty (N)	Claims	10, 12-19, 22-25, 27-34	YES
	Claims	1-9, 11, 20, 21, 26	NO
Inventive Step (IS)	Claims	22-24	YES
	Claims	1-21, 25-34	NO
Industrial Applicability (IA)	Claims	1-34	YES
	Claims	NONE	NO

2. CITATIONS AND EXPLANATIONS

Claims 22-24 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest the attachment for controlling the mixing of said ion concentration with said airflow stream and hair.

Claims 1-34 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

---------- NEW CITATIONS ----------

Supplemental Box
(To be used when the space in any of the preceding boxes is not sufficient)

TIME LIMIT:
The time limit set for response to a Written Opinion may not be extended. 37 CFR 1.484(d). Any response received after the expiration of the time limit set in the Written Opinion will not be considered in preparing the International Preliminary Examination Report.

V. 2. Citations and Explanations:
Claims 1-9, 11, 20, 21, and 26 lack novelty under PCT Article 33(2) as being anticipated by Harris et al (6,393,718). Harris et al shows a housing (fig. 1), one or more ion generators, one or more ion emitters, situated adjacent to but outside the housing (col. 2, lines 11-16), form an ion concentration outside said housing and at a distance form a users hair (col. 2, lines 11-16), said hair is encompassed by said ion concentration (col. 2, lines 2-4), at least one blower (fig. 2), at least one aperture (fig. 2), ion emitters situated at a distance form said airflow (fig. 1), said at least one attachment for cooperating with said air outlet to manipulate said airflow (8, 9, fig. 1), said at least eon attachment is configured to variably control aeration of said positive and negative ions into said airflow (8, 9, fig. 1), said at least one blower alters said airflow velocity, thereby controlling aspiration of said positive and negative ions into said airflow (8, 9, fig. 1), said one or more ion emitters are positioned in a casing formed on said housing (fig. 1), said ion emitters are arranged to generate a predictable area of concentrated ions and to minimize any dilution resulting form direct exposure to said airflow (col. 3, lines 53-55), providing a device having a housing with at least one air outlet disposed therein (fig. 1), a blower for generating an airflow stream (fig. 2), one or more ion generators, and one or more ion emitters disposed outside, but adjacent said housing and spaced a distance form said air flow exiting said air outlet (23, 24, fig. 2); applying said blower generated airflow toward said hair for drying and/or styling; and generating an ion concentration having a certain area and spaced a certain distance form said airflow to minimize any dilution resulting form direct exposure to said airflow (col. 3, lines 53-55).
Claims 12-19, 27-34 lack an inventive step under PCT Article 33(3) as being obvious over Harris et al (6,393,718). Harris et al discloses a housing (fig. 1), one or more ion generators, one or more ion emitters, situated adjacent to but outside the housing (col. 2, lines 11-16), said one or more ion emitters are positioned in a casing formed on said housing (fig. 1), providing a device having a housing with at least one air outlet disposed therein (fig. 1), a blower for generating an airflow stream (fig. 2), one or more ion generators, and one or more ion emitters disposed outside, but adjacent said housing and spaced a distance form said air flow exiting said air outlet (23, 24, fig. 2); applying said blower generated airflow toward said hair for drying and/or styling ; and generating an ion concentration having a certain area and spaced a certain distance form said airflow to minimize any dilution resulting form direct exposure to said airflow (col. 3, lines 53-55). Harris et al discloses applicant's invention substantially as claimed with the exception of said casing is selectively removable from said housing, said ion emitters are formed form a conductive metal, conductive polymer, conductive silicon, said ion emitters form an array, said ion emitters create an ion concentration having a negative polarity, positive polarity, both a positive and a negative polarity. At the time the invention was made it would have been an obvious matter of design choice to a person of ordinary skill in the art to have the said casing is selectively removable from said housing, said ion emitters are formed form a conductive metal, conductive polymer, conductive silicon, said ion emitters form an array, said ion emitters create an ion concentration having a negative polarity, positive polarity, both a positive and a negative polarity because applicant has not disclosed that the type of material, shape of the array, or polarity of the ion concnettrationprovides an advantage, is used for a particular purpose or solves a stated problem. On e of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the material, shape, and polarity of Harris or the claimed material, shape, and polarity

Supplemental Box
(To be used when the space in any of the preceding boxes is not sufficient)

because both materials shapes and polarities perform the same function of drying equally well.

Claims 10 and 25 lacks an inventive step under PCT Article 33(3) as being obvious over Harris et al in view of Lee et al (6,640,049). Harris et al discloses a housing (fig. 1), one or more ion generators, one or more ion emitters, situated adjacent to but outside the housing (col. 2, lines 11-16), said one or more ion emitters are positioned in a casing formed on said housing (fig. 1), providing a device having a housing with at least one air outlet disposed therein (fig. 1), a blower for generating an airflow stream (fig. 2), one or more ion generators, and one or more ion emitters disposed outside, but adjacent said housing and spaced a distance form said air flow exiting said air outlet (23, 24, fig. 2); applying said blower generated airflow toward said hair for drying and/or styling ; and generating an ion concentration having a certain area and spaced a certain distance form said airflow to minimize any dilution resulting form direct exposure to said airflow (col. 3, lines 53-55). Harris et al discloses applicant's invention substantially as claimed with the exception of one or more ion generators are configured to provide a variety of voltage outputs, as well as to generate combinations of positive and negative ions. Lee et al teaches one or more ion generators are configured to provide a variety of voltage outputs, as well as to generate combinations of positive and negative ions (abstract) for the purpose of promoting grooming and rapid drying of users hair. It would have been obvious to one of ordinary skill in the art to modify Harris et al by including one or more ion generators are configured to provide a variety of voltage outputs, as well as to generate combinations of positive and negative ions as taught by Lee et al for the purpose of promoting grooming and rapid drying of users hair so that time savings are achieved.

---------- NEW CITATIONS ----------